



CLAIMS

What is claimed is:

5 1. A system for providing secure access to secure information comprising:

a token in the possession of the token generator, where the token itself is random and non-predictable and contains no information but is used for the sole purpose of synchronization of the token processor and the token generator;

10 a token generator containing a transmitter used to pass the said token to a token processor;

a token processor having a reader for said token;

15 a token processor having the ability to generate a secure key to be used in the token generator to decipher an encrypted data sequence;

a token processor which has the ability to generate an encrypted data sequence based upon the secure key;

20 a token processor containing a transmitter used to pass the said secure key back to the token generator;

a token processor which has the ability to pass the encrypted data sequence for deciphering by the token generator;

a token generator which has the ability to receive the key from the token processor;

30 a token generator which has the ability to process the combination of the token and the key received from the token processor in order to decipher an encrypted data sequence;

2. A system as claimed in claim 1 wherein the said key is itself time-varying and non-predictable. The said key should be derived from the said token, though it is not solely dependent on it, whether the said token is time varying or constant.

5 3. A system as claimed in claim 1 wherein the algorithm used in the token processor to generate the encrypted data sequence is embedded inside the token processor itself, and the algorithm used in the token generator to decipher the encrypted data sequence is embedded inside the token generator itself. The algorithms used in token generator and the token processor must match each other.

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6 5. A system as claimed in claim 1 wherein the said token can or cannot be modified by outside influences.

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7 6. A system as claimed in claim 1 wherein the said key can or cannot be modified by outside influences.

8 7. A system as claimed in claim 1 wherein the algorithm used inside the token processor to generate the encrypted data sequence can or cannot be modified by outside influences.

20 9. A system as claimed in claim 1 wherein the algorithm used inside the token generator to decipher the encrypted data sequence can or cannot be modified by outside influences.